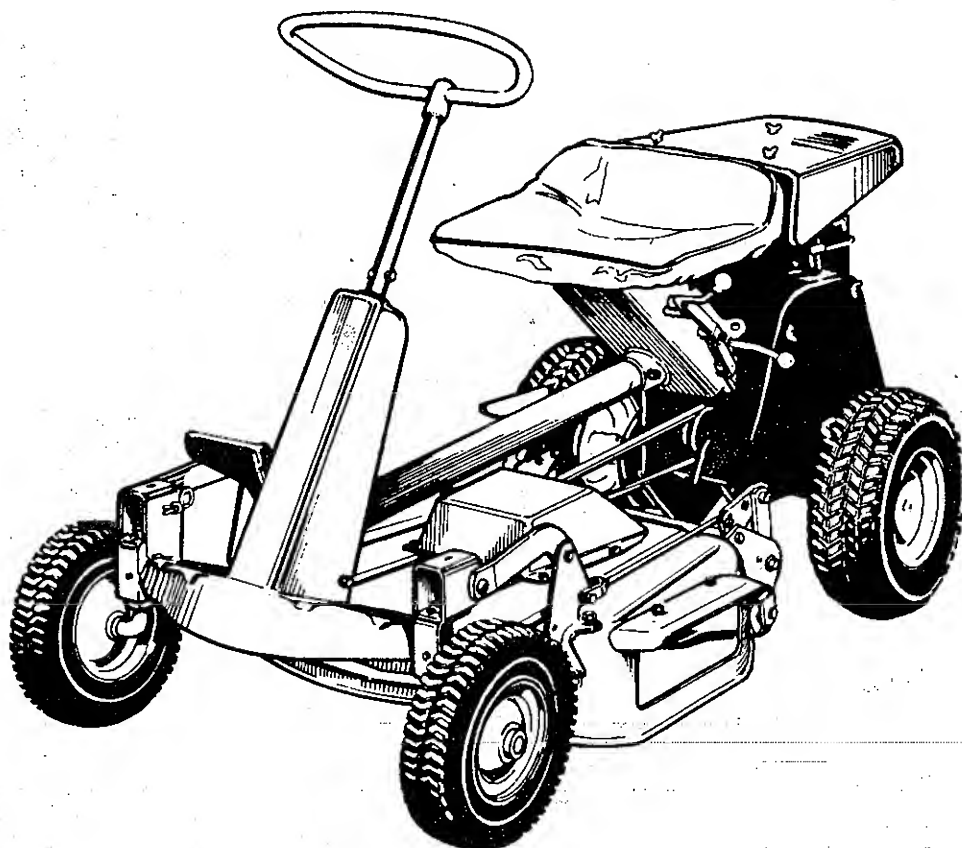


# ***Simplicity***



**404 WONDERBOY  
RIDING MOWER  
Mfr's. No. 390**

**with**

**24 " ROTARY MOWER  
Mfr's. No. 358**

**1968 Model Year**

PRINTED IN USA

**SIMPLICITY MANUFACTURING COMPANY, INC.**

**1662**

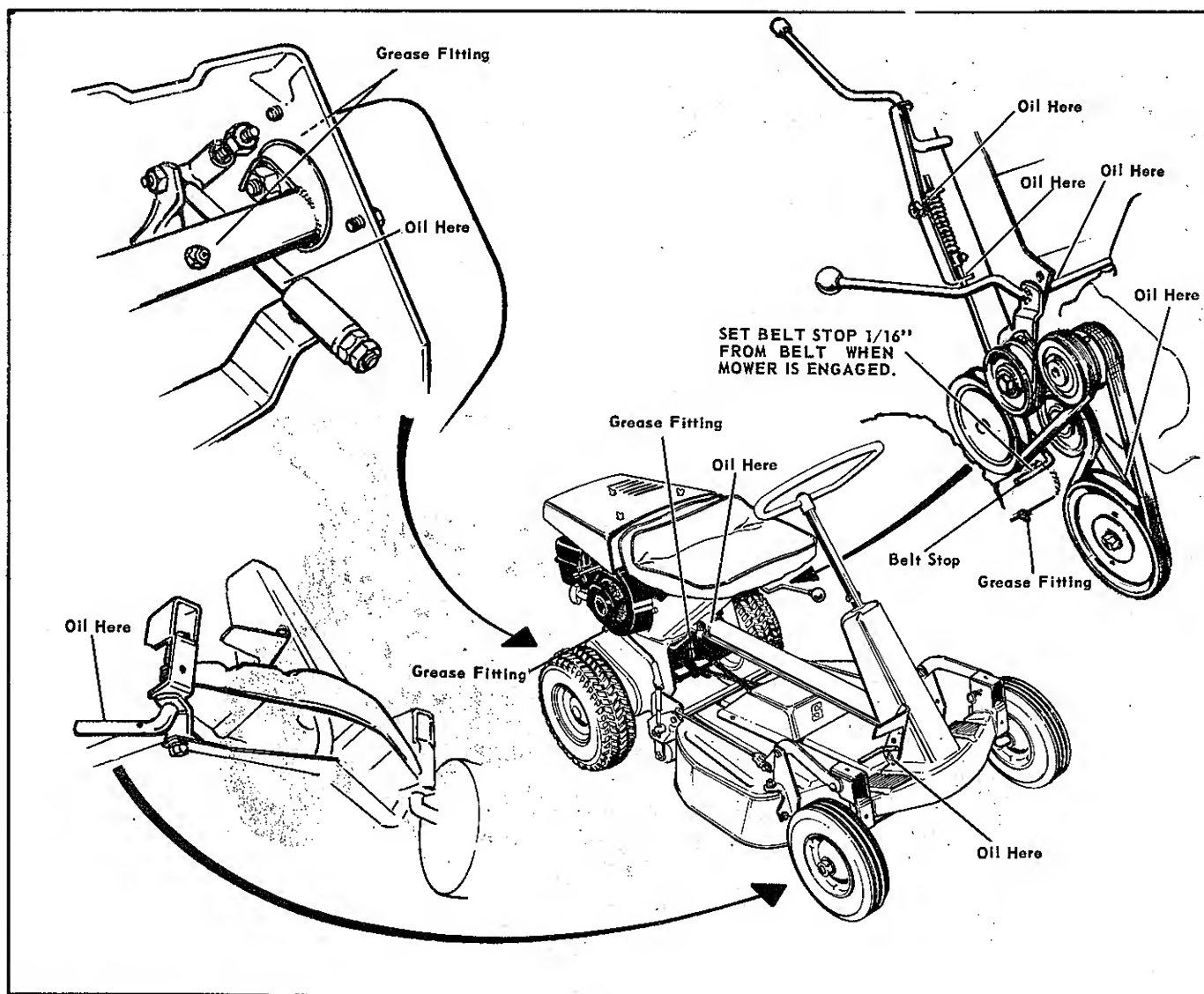


FIGURE 1

## PACKING & ASSEMBLY

The Wonder-Boy "404" and its 24" Rotary Lawnmower are shipped together, completely assembled except for the steering wheel post assembly.

Remove the hex head capscrew from the steering shaft. Slip steering wheel post assembly over steering shaft. Locate hole in shaft and steering post assembly. DO NOT ALLOW post assembly to strike on black nylon washer. Insert capscrew and secure in place with locknut.

## PREPARATION FOR OPERATION

The Wonder-Boy "404" is lubricated at the factory. However, to insure grease has been applied, it is suggested to apply several shots of Lithum-based, general purpose automotive type grease prior to operation. Before applying grease, remove all dirt, grit and paint from grease fittings (4). Avoid forcing dirt etc. into the bearings with the clean grease. Refer to Figure # 1 for location of fittings.

Lubrication of the four grease fittings should be conducted after every ten hours or operation.

Apply SAE #10 oil to the following points:

1. Front wheel bearings and spindle and steering linkages - Figure #1
2. Foot pedal assembly pivot point and all sleeves of clutch rod - Figure #1
3. Main pivot of tractor beneath seat - Figure #1

Various joints and sleeves of shift linkage for transmission and mower - Figure #1

Service engine air cleaner and engine crankcase as recommended in engine manual. REMEMBER: Clean air and clean oil will give you long, trouble-free operation - DIRT can ruin your engine in a hurry. Follow engine manufacturer's recommendations on oil weight for the different seasons.

Reduce rear tire pressure to 8 lbs.

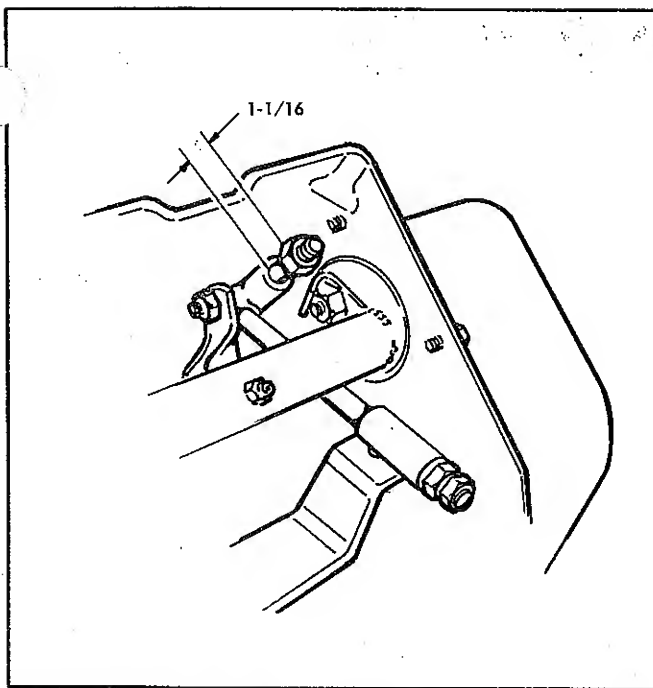


FIGURE 2

## IMPORTANT

### CLUTCH AND BRAKE ADJUSTMENT

Adjustment of clutch rod for de-clutching and braking is very important. The correct adjustment will assist in smooth engagement and disengagement of machine's motion and the application of the brake. This is accomplished by adjustment of the nut as indicated in Figure #2. There should be 1-1/16" clearance on the clutch rod between rod guide and nut when the foot pedal is in its most upward position and the clutch rod is against its stop. (Stop is frame beneath the seat). This should provide proper declutching action. The clearance should be 1/16" between nuts and rod guide for correct application of brake. By applying these adjustments, correct declutching action shall be encountered prior to the braking action. After some time of operation, additional adjustment may be necessary.

## IMPORTANT

After the initial "Run-in" period, recheck pulley alignment. Check and retighten the pulley set screw.

## OPERATION

NOTE: Make certain transmission is in neutral, and implement is declutched before starting engine.

Open throttle lever about half way, (Fig. 3) then move choke lever (Fig. 3) to full choke position. Pull recoil starter rope. When engine starts, gradually return the choke to its normal position.

The clutch and brake are operated by the pedal on the right front foot rest (Fig. 3). Depressing the pedal de-clutches the transmission for shifting, and applies the brake. Change gears only when the rider

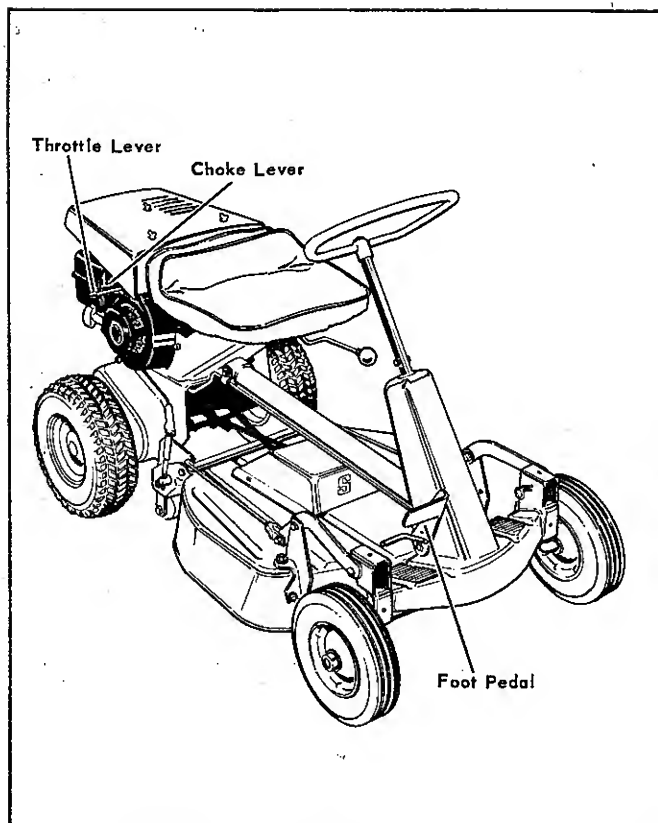


FIGURE 3

is at a standstill and properly de-clutched. With the clutch pedal depressed, move the shift lever into the gear position desired. Then release the clutch pedal gradually to put the rider into motion.

Select the engine speed desired by means of the throttle lever. (Fig. 3)

To stop, depress the foot pedal all the way, then shift gears into the neutral position. Rotate the throttle lever to the stop position to cut off the engine ignition.

## MAINTENANCE

1. Follow regular procedures for engine maintenance as described in the engine manual. Check the crankcase oil level every 5 hours, and change oil in crankcase and air cleaner at least every 20 hours of use.
2. Grease all fittings every 10 hours of use. See Fig. 1
3. Oil the clutch and brake linkage pivot points every five hours of use.
4. Inspect pulley alignment, and check tightness of all pulley set screws after each 25 hours of use.

# MOWER DECK & ARBOR

Ref. Let.	Part No.	Description
A	108679	Tube Ass'y
B	108397	Arbor Ass'y
C	108181	Washer
D	108257	Washer
E	108202	Radial Bearing
F	108201	Spacer
G	108399	Spacer
H	158400	Pulley
J	158378	Special Washer
K	719002	Plain Washer 5/16"
L	717510	Full Lock Hex. Nut 3/8"-16
M	108402	Guard Belt
N	108276	Knife Blade
P	715030	Hex. Cap Screw 3/8"-16 x 3/4"
Q	720002	Lock Washer, 3/8"
R	108403	Housing
S	705004	Hex. Cap Screw, 3/8"-16 x 3/4"
T	720002	Lock Washer 3/8"
U	717003	Full Hex. Nut 3/8"-16
V	715067	Hex. Screw, Washer Hd. Taptite 1/4"-20 x 3/8"
W	108404	Deflector
X	705002	Hex. Cap Screw 1/4"-20 x 1/2"
Y	721002	Lock Washer 1/4"
Z	717005	Full Hex. Nut 1/4"-20
AA	106016	"V" Belt
AB	108472	Washer

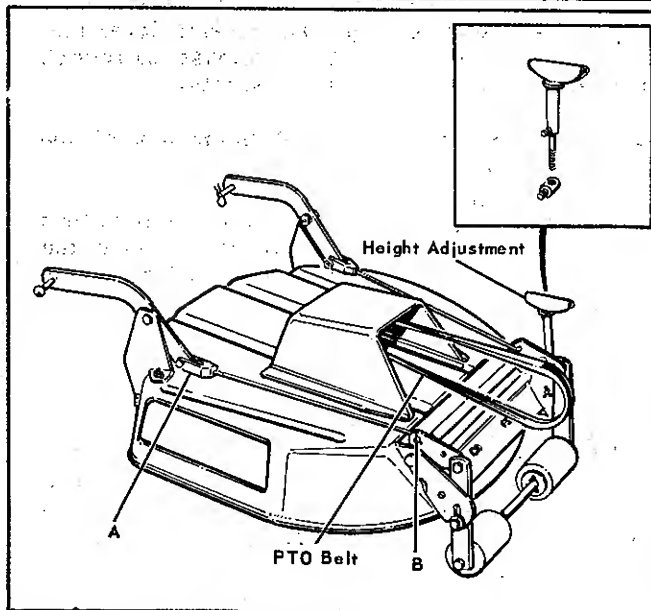
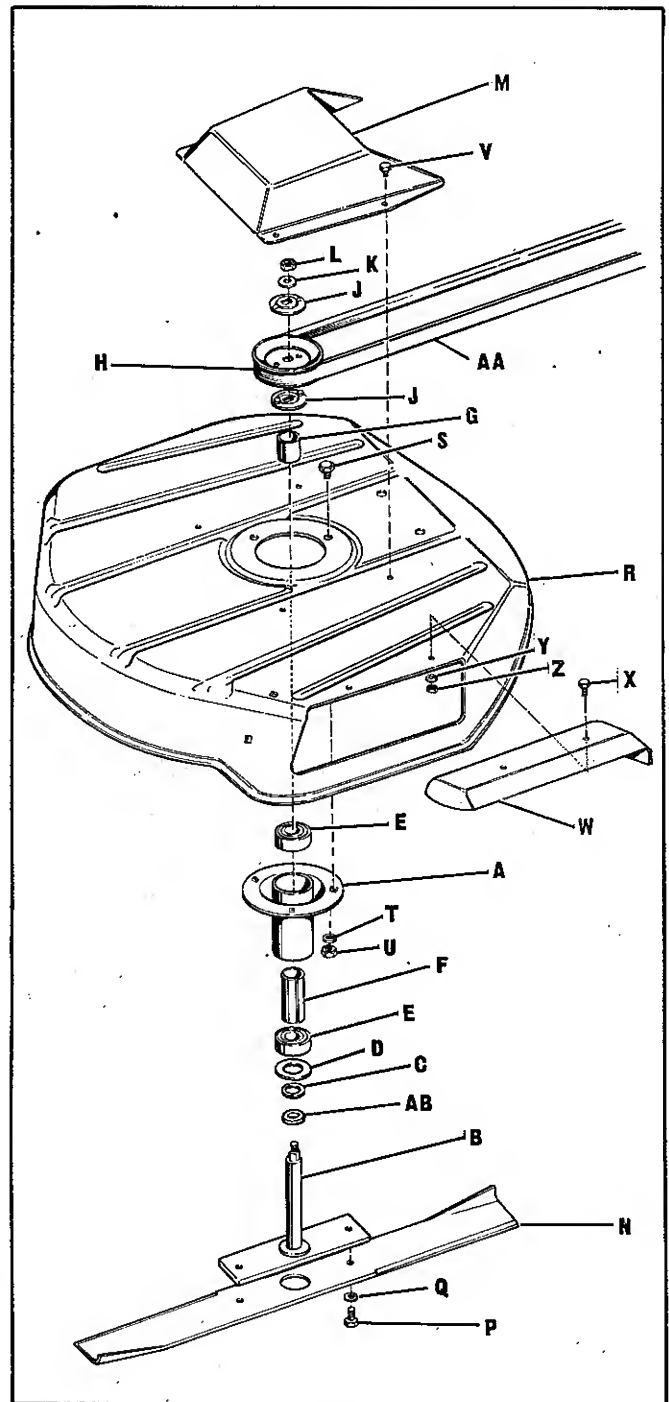


FIGURE 4

## PREPARATION FOR OPERATION

The 24" Rotary Lawn Mower is attached to the Wonder Boy 404. Before the initial "Run-in" period place the Wonder - Boy and mower on a flat surface and check the height of the blade tip from the ground at the front and rear of the housing. For best cutting operation the rear tip should be about 1/4" higher than the front tip. To obtain this adjustment, re-po-

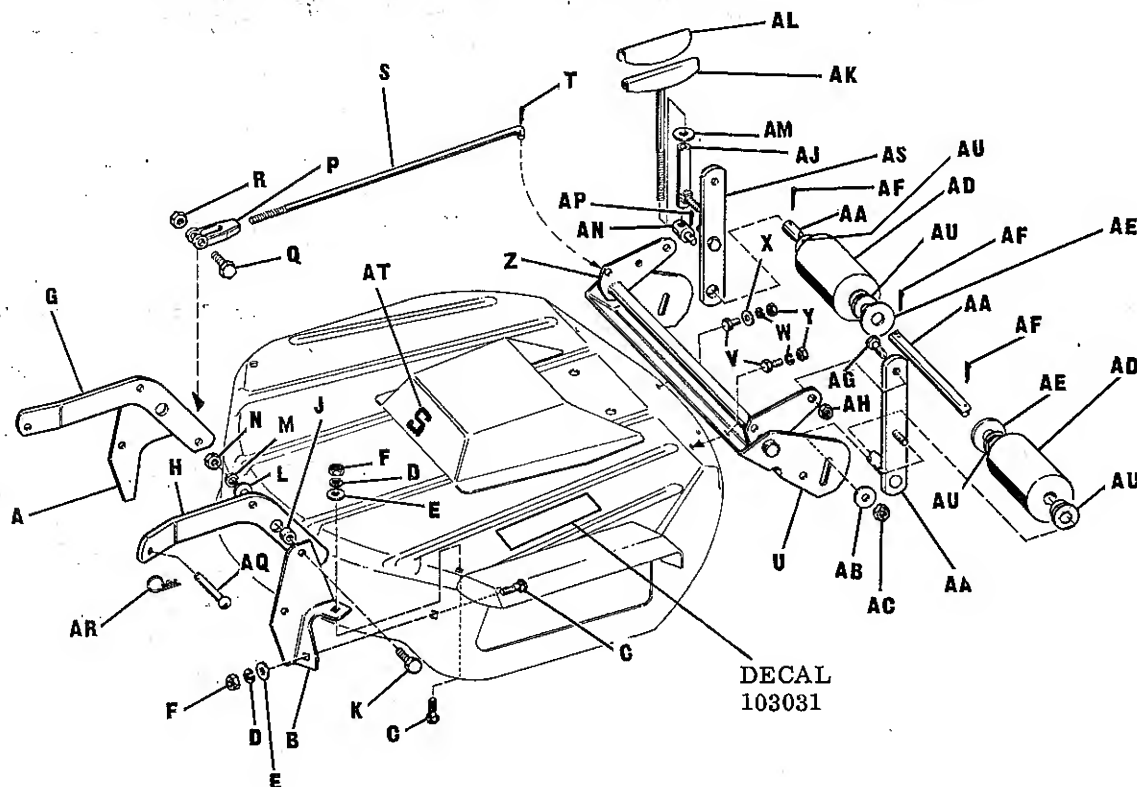


sition, as necessary, the threaded rods in their clevises A, then re-insert the rod ends in the rear roller bracket holes B, and secure with cotter pins.

## MOWER OPERATION

To operate the mower, move the power take-off lever to the "on" position, making sure that the tractor engine is operating at sufficient speed to take care of the additional load. Then as the mowing operation is started, regulate the mower speed as needed by means of the tractor throttle control lever. When the PTO is engaged the set collar should have a

# MOWER HITCH



Ref. Let.	Part No.	Description
A	108273	Front R.H. Bracket, #10 Ga. x 3-1/2" x 5-7/8" lg.
B	108274	Front L.H. Bracket, #10 Ga. x 3-1/2" x 5-7/8" lg.
C	703004	Carriage Bolt, 3/8"-16 x 3/4"
D	720002	Lock Washer 3/8"
E	719001	Plain Washer 3/8"
F	717003	Full Hex. Nut, 3/8"-16
G	108271	Front R.H. Lever 5/16" x 1-1/4 x 13" lg.
H	108272	Front L.H. Lever 5/16" x 1-1/4 x 13" lg.
J	154177	Bushing
K	705005	Hex. Cap Screw 3/8"-16 x 1" lg.
L	719001	Plain Washer 3/8"
M	720002	Lock Washer 3/8"
N	717003	Full Hex. Nut 3/8"-16
P	108157	Clevis- Adj.
Q	715042	Hex. Cap Screw 3/8"-16 x 1-1/4" - 3/4" lg.
R	717510	Full Lock Hex. Nut 3/8"-16
S	108286	Height Adj. Rod
T	722001	Cotter Pin 3/32" x 3/4"
U	108270	Roller Bracket

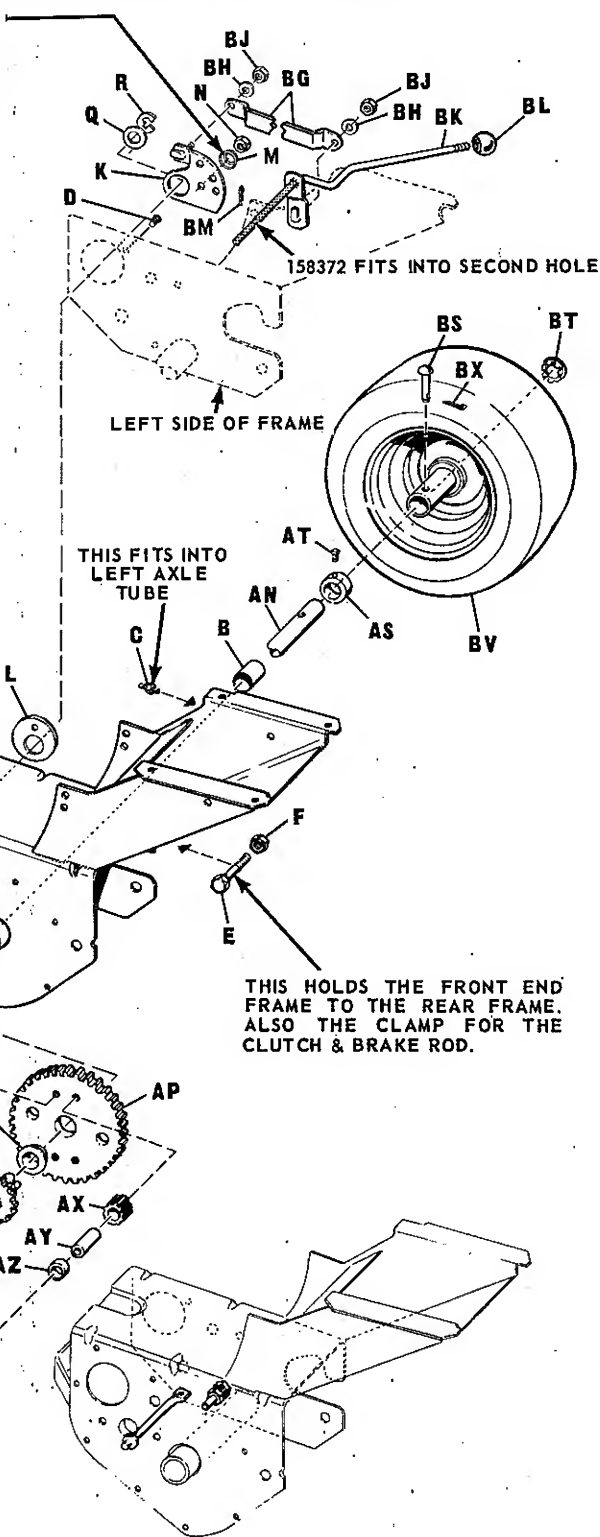
Ref. Let.	Part No.	Description
V	705017	Hex. Cap Screw 5/16"-18 x 3/4"
W	720001	Lock Washer 5/16"
X	719002	Plain Washer 5/16"
Y	717001	Full Hex. Nut, 5/16"-18
Z	108283	Rear Lever Ass'y
AA	108277	Roller Bar & Shaft Ass'y
AB	719001	Plain Washer 3/8"
AC	717510	Full Lock Hex. Nut 3/8"-16
AD	108431	Roller w/Bushing
AE	116001	Washer
AF	722001	Cotter Pin 3/32" x 3/4" lg.
AG	705005	Hex. Cap Screw 3/8"-16 x 1"
AH	717003	Full Hex. Nut 3/8"-16
AJ	108287	Crank, Socket Ass'y
AK	108415	Adj. Screw Ass'y
AL	106516	Handle Cover
AM	719001	Plain Washer 3/8"
AN	108172	Pivot
AP	722001	Cotter Pin 3/32" x 3/4"
AQ	100028	Pin
AR	8161045	Spring Clip
AS	108278	Bar Assembly Roller
AT	108405	Decal
AU	108419	Bushing

clearance of about 7/8" from bottom of bracket. Do not adjust set collar to have spring completely compressed. If final adjustment can not be made by this spring, reposition front mower hitch to forward most hole on rider. Readjustment of spring tension

set collar may be necessary. When the adjusting handle is turned in the clockwise direction, the mower is raised, both front and rear. Reversing the direction lowers the mower.

## TRANSMISSION & REAR WHEELS

THIS SPRING IS ATTACHED TO  
PART 158338.  
ADJUST NUT (717510) TO GIVE  
POSITIVE DETENT ACTION AND  
FREE BUT TIGHT MOVEMENT  
INTO ALL THREE POSITIONS  
WHEN OPERATED BY HAND  
LEVER.



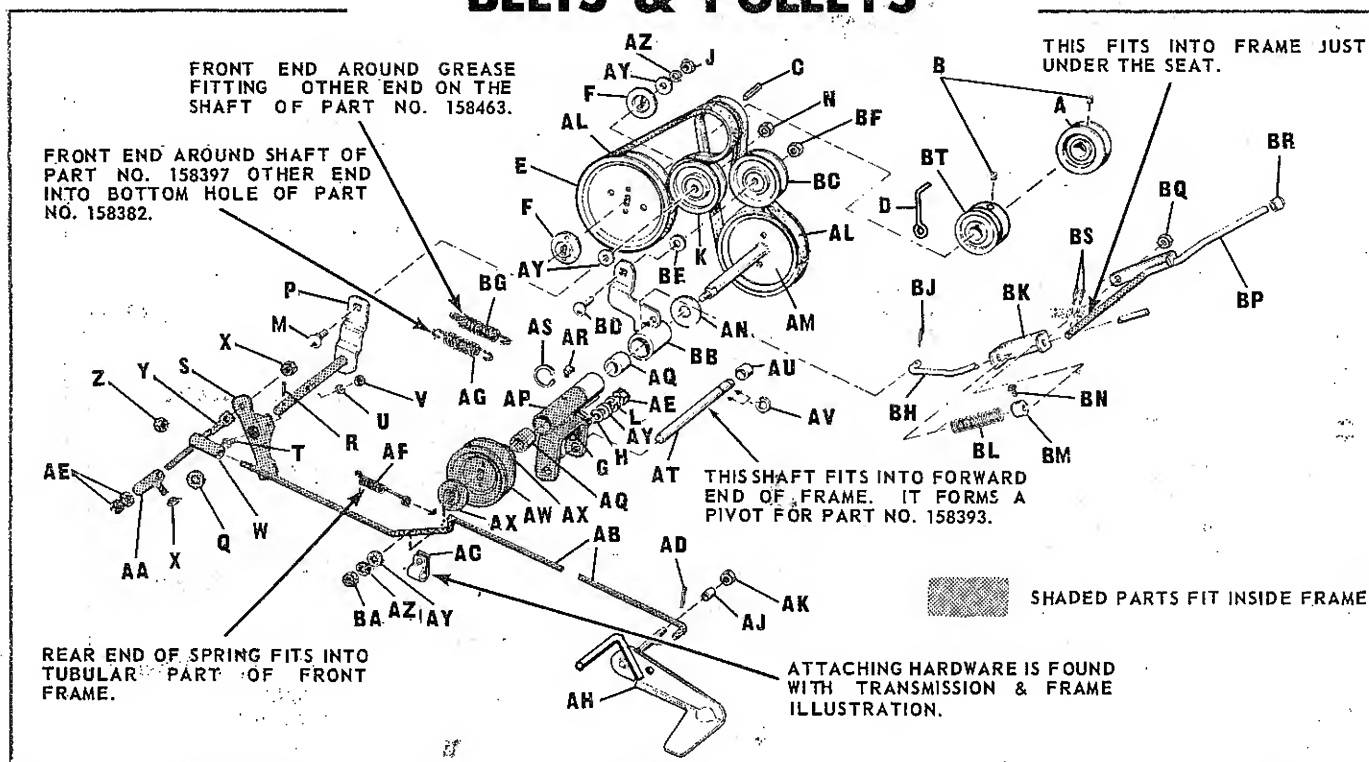
SHADED PARTS FIT INSIDE FRAME

# PARTS LIST

Ref. Let.	Part No.	Description
A	158228	Engine Base Frame & Seat Support Assembly
B	158337	Bearing
C	727002	Grease Fitting
D	714019	Rd. Hd. Screw 12-24 x 1/2" lg
E	715072	Hex. Cap Screw, 3/8"-16 x 2-3/4"
F	717510	Full Lock Hex. Nut, 3/8"-16
G	158338	Bearing Housing Ass'y.
H	8051038	Bearing
J	727001	Grease Fitting
K	158339	Detent Lever Ass'y.
L	153094	Shield
M	157127	Conical Spring
N	717510	Full Lock Hex. Nut, 3/8"-16
P	158342	Pulley Shaft Ass'y.
Q	153079	Washer
R	153124	Retaining Ring
S	121118	Reverse Pinion
T	121163	Pinion Spacer
U	719002	Plain Washer, 5/16"
V	158472	Shield
W	121139	Lock Plate
X	715033	Hex. Hd. Bolt 3/8"-16 x 1-1/2" lg
Y	153090	L. H. Full Hex. Nut
Z	158442	Interm. Shaft Assembly
AA	158445	Brake Arm
AB	158440	Anchor Pin
AC	705025	Hex. Cap Screw, 1/4"-20 x 1-1/2"
AD	717509	Full Lock Hex. Nut, 1/4"-20
AE	158441	Stud
AF	720002	Lock Washer, 3/8"
AG	717003	Full Hex. Nut, 3/8"-16
AH	121044	Lock Pin
AJ	158446	Brake Lining Retainer
AK	158447	Brake Lining
AL	158349	Interd. Gear Assembly
AM	153078	Intermd. Pinion Bearing

Ref. Let.	Part No.	Description
AN	158352	L. H. Axle Shaft
AP	158355	Drive Gear
AQ	158356	Drive Gear Bushing
AR	118252	Washer
AS	158357	Set Collar
AT	713002	Cup Pt. Sq. Hd. Set Screw, 5/16"-18 x 3/8"
AU	158358	Thrust Cup
AV	158359	R. H. Axle & Bushing Ass'y.
AW	158363	Bushing
AX	121311	Diff. Pinion
AY	121083	Diff. Pinion Spindle
AZ	121084	Diff. Spacer
BA	158364	Diff. Plate
BB	158365	Diff. Plate Bushing
BC	705006	Hex. Cap Screw, 3/8"-16 x 2"
BD	158467	Gear Case Ass'y.
BE	158370	Gear Case Gasket
BF	715067	Taptite Washer Hd. Ind. Hex. Std. Screw, 1/4"-20 x 3/8"
BG	158371	Shift Link, 1/8" x 3/4"
BH	719006	Plain Washer, 1/4"
BJ	717511	Full Lock Hex. Nut, 5/16"-18
BK	158372	Shift Lever Assy.
BL	155044	Knob
BM	722006	Cotter Pin, 1/8" Dia. x 1"
BN	158455	Draw Bar
BP	705005	Hex. Cap Screw, 3/8"-16 x 1"
BQ	720002	Lock Washer, 3/8"
BR	717003	Full Hex. Nut, 3/8"-16
BS	118053	Pin
BT	158436	Plug Button
BU	158433	Plug Button
BV	158430	L. H. Wheel & Tire Ass'y.
BW	158434	R. H. Wheel & Tire Ass'y.
BX	722009	Cotter Pin

# BELTS & PULLEYS

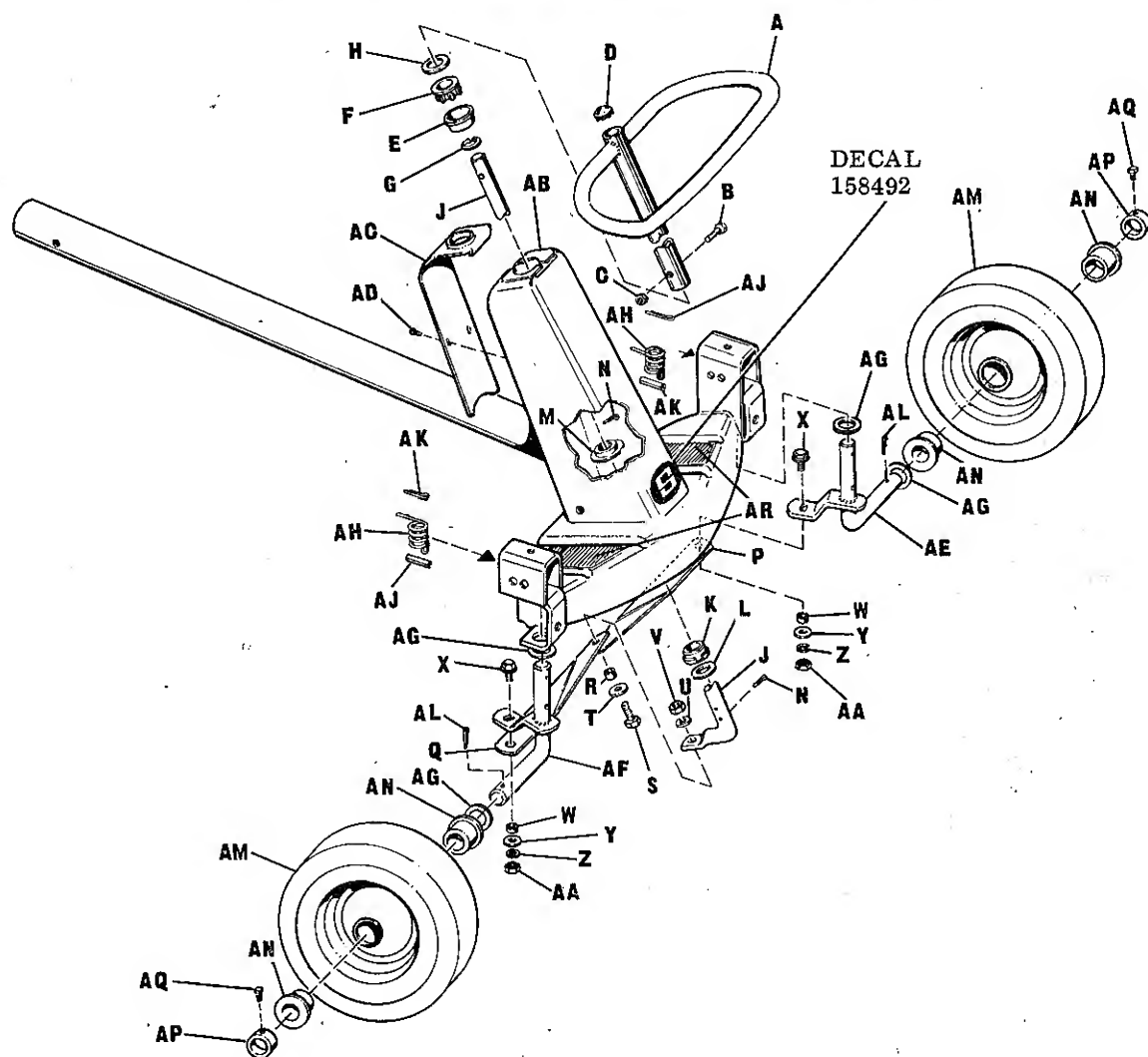


Ref. Let.	Part No.	Description
A	118331	Engine Pulley
B	713503	Setscrew, 5/16"-18 x 5/16"
C	8221042	Engine Pulley Key
D	158499	Belt Stop
E	158377	Pulley (Transmission)
F	158378	Special Washer
G	705001	Hex Cap Screw, 5/16"-18 x 7/8" lg.
H	8021014	Belt Stop
J	717003	Full Hex. Nut, 3/8"-16
K	154534	Idler Pulley (Transmission Drive)
L	720001	Lock Washer, 5/16"
M	703003	Carriage Bolt, 3/8"-16 x 1" lg
N	717510	Full Hex. Lock Nut, 3/8"-16
P	158463	Idler Pulley Arm Assembly
Q	719003	Plain Washer, 7/16"
R	722006	Cotter Pin, 1/8" Dia. x 1"
S	158382	Brake & Clutch Lever
T	715062	Hex. Cap Screw, 1/4"-20 x 1-1/4"
U	720003	Lock Washer, 1/4"
V	717005	Full Hex. Nut, 1/4"-20
W	156303	Rod Guide Ass'y
X	717511	Full Lock Hex. Nut, 5/16"-18
Y	158383	Brake Rod
Z	717511	Full Lock Hex. Nut, 5/16"-18
AA	164094	Rod Guide Ass'y
AB	158497	Transmission Clutch Rod
AC	158476	Clamp
AD	722001	Cotter Pin, 3/32" Dia. x 3/4"
AE	717001	Full Hex. Nut, 5/16"-18
AF	158385	Spring (For Clutch Rod)
AG	156302	Spring (Transmission Clutch)
AH	158494	Foot Pedal Ass'y
AJ	158388	Spacer
AK	717510	Full Lock Hex. Nut, 3/8"-16
AL	158389	"V" Belt

Ref. Let.	Part No.	Description
AM	158390	Pulley & Shaft Ass'y
AN	119018	Washer
AP	158393	Housing Ass'y
AQ	108054	Needle Bearing
AR	727004	Grease Fitting
AS	158396	Retaining Ring
AT	158397	Pivot Shaft
AU	158398	Spacer
AV	158399	Retaining Ring
AW	158400	Pulley (Mower Drive)
AX	158378	Special Washer
AY	719002	Plain Washer, 5/16"
AZ	720002	Lock Washer, 3/8"
BA	717003	Full Hex. Nut, 3/8"-16
BB	158461	Idler Lever Ass'y
BC	154534	Idler Pulley
BD	703003	Carriage Bolt, 3/8"-16 x 1"
BE	719002	Plain Washer, 5/16"
BF	717510	Full Lock Hex. Nut, 3/8"-16
BG	154369	Spring (P.T.O.)
BH	158405	P. T. O. Clutch Rod
BJ	722001	Cotter Pin, 3/32" Dia. x 3/4"
BK	158406	Rod Guide Ass'y
BL	8191045	Spring
BM	8191022	Set Collar
BN	713001	Set Screw 1/4"-20 x 3/8"
BP	158408	P. T. O. Control Handle Ass'y
BQ	717511	Full Lock Hex. Nut, 5/16"-18
BR	158437	Knob
BS	722006	Cotter Pin, 1/8" Dia. x 1"
BT	158498	Pulley Half



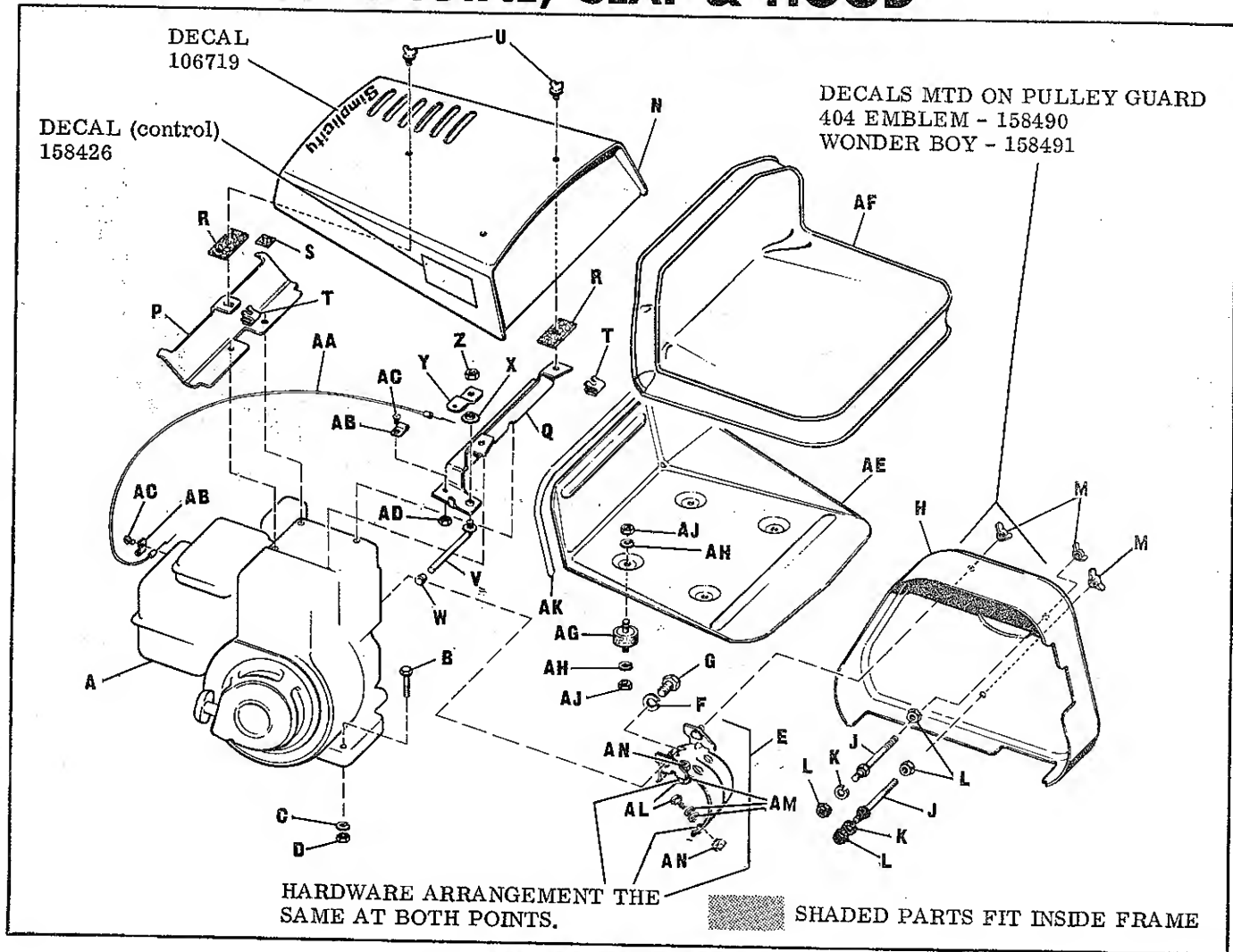
# STEERING & FRONT WHEELS



Ref. Let.	Part No.	Description
A	158220	Steer. Handle Ass'y
B	705019	Hex. Cap Screw 5/16"-18 x 1-1/4" lg.
C	717511	Full Lock Hex. Nut, 5/16"-18
D	156279	Plug Button
E	158222	Steer. Bushing Cup
F	157077	Steering Bushing
G	157241	Snap Ring
H	158223	Washer
J	158224	Steering Shaft
K	159026	Bushing
L	108181	Washer
M	158012	Steering Shaft Cup
N	722014	Cotter Pin, 5/32" Dia. x 1-1/4"
P	158225	L. H. Steering Link
Q	158226	R. H. Steering Link
R	158227	Spacer
S	705009	Hex. Cap Screw, 3/8-16 x 1-1/2
T	719001	Plain Washer, 3/8
U	720002	Lock Washer, 3/8"
V	717003	Full Hex. Nut, 3/8"-16
W	153081	Spacer

Ref. Let.	Part No.	Description
X	715061	Whiz Lock Flange Hex. Screw, 3/8-16 x 1"
Y	719001	Plain Washer, 3/8"
Z	720002	Lock Washer, 3/8"
AA	717003	Full Hex. Nut, 3/8"-16
AB	158210	Front Frame & Axle Ass'y
AC	158215	Steering Support Cover
AD	714004	Self Tapping Screw, #10 x 3/8"
AE	158216	L. H. Spindle Ass'y
AF	158219	R. H. Spindle Ass'y
AG	108131	Washer
AH	121011	Torsion Spring
AJ	723001	Roll Pin, 5/16" Dia. x 1-1/4"
AK	722015	Cotter Pin, 5/32" Dia. x 1"
AL	722003	Cotter Pin, 3/16" Dia. x 1-1/4"
AM	158466	Front Wheel & Tire Assy.
AN	121299	Wheel Bearing (For Service)
AP	159094	Set Collar
AQ	713503	Hollow Hd. Cup Pt. Set Screw, 5/16" - 18 x 5/16"
AR	158428	L. H. & R. H. Foot Pad

# ENGINE, SEAT & HOOD



## PARTS LIST

Ref. Let.	Part No.	Description
A		4 H. P. Engine
B	705018	Hex Cap Screw, 5/16"-18 x 1-1/2"
C	720001	Lock Washer, 5/16"
D	717001	Full Hex. Nut, 5/16"-18
E	158480	Belt Stop Ass'y.
F	721506	Lock Washer, 1/2"
G	706010	Hex. Cap Screw, 1/2"-20 x 3/4"
H	158416	Pulleys Guard
J	158418	Pulley Guard Stud
K	720001	Lock Washer, 5/16"
L	717001	Full Hex. Nut, 5/16"-18
M	718006	Wing Nut, 5/16"-18
N	158419	Hood Ass'y
P	158449	Rear Hood Support
Q	158423	Front Hood Support
R	121399	Felt Gasket
S	158450	Felt Gasket
T	718030	Retainer Nut
U	715037	Thumb Screw

Ref. Let.	Part No.	Description
V	158186	Handle (Throttle Control)
W	159112	Knob
X	159107	Throttle Washer
Y	158424	Throttle Arm
Z	717510	Full Lock Hex. Nut, 3/8"-16
AA	158425	Cable & Wire Ass'y (Throttle)
AB	158475	Clip
AC	710004	Hd. Rd. Mach. Screw, #10-32 x 3/8"
AD	717007	Full Hex. Nut, #10-32
AE	158153	Seat Panel
AF	158207	Seat Pad
AG	159085	Cushion Connector
AH	720001	Lock Washer, 5/16"
AJ	717001	Full Hex. Nut, 5/16"-18
AK	159177	Tape 2 feet per pan
AL	705004	Hex. Cap Screw 3/8"-16 x 3/4"
AM	720002	Lock Washer 3/8"
AN	717003	Full Hex. Nut 3/8"-16

## WARRANTY

The company warrants Simplicity Products to be free from defects in material and workmanship except the company makes no warranty express or implied with respect to tires, engines and engine accessories which generally are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year, under normal use, from date of purchase, will be replaced free of charge, f.o.b. Port Washington, Wisconsin, provided such part is returned to factory transportation charges prepaid and is found to be defective upon examination at the factory. The company is not obligated under this warranty to bear cost of labor or delivery charges in replacement of defective parts. This warranty does not apply to any Simplicity Products altered outside of Simplicity's factory. Such replacement of defective parts shall be the exclusive remedy and in no event shall Simplicity be liable for consequential damages. EXCEPT AS SPECIFICALLY PROVIDED HEREIN, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON ANY SIMPLICITY PRODUCT.

Customer's Name \_\_\_\_\_

Address \_\_\_\_\_

Mfg. No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Date Purchased \_\_\_\_\_

Purchased From \_\_\_\_\_

Address \_\_\_\_\_

Engine Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Type No. \_\_\_\_\_

To obtain replacement parts from dealer, advise quantity, part number and description.



Remember...

### FOR YOUR SAFETY

- 1 ALWAYS STOP ENGINE BEFORE LEAVING MACHINE
- 2 ALWAYS STOP ENGINE BEFORE SERVICING OR ADJUSTING MACHINE OR EQUIPMENT
- 3 ALWAYS KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER-DRIVEN PARTS



**SIMPLICITY MANUFACTURING COMPANY, INC.**  
PORT WASHINGTON, WISCONSIN 53074